

CLOSED-LOOP IV FLUID FLOW CONTROL

Abstract of the Disclosure

5 In a closed-loop process, a controller uses a flow sensor to monitor the flow of a medicinal fluid being infused into a patient, to achieve a desired rate of flow. A relatively inexpensive peristaltic pump or electronically controlled valve can be used to vary the flow of the medicinal fluid through a fluid line. A Y site within the fluid line includes an integral flow sensor having an orifice. The flow sensor includes proximal and distal pressure sensors disposed on opposite sides of the orifice to monitor the distal and proximal pressure, producing a signal
10 indicative of the rate of flow of the medicinal fluid through the fluid line. A signal produced by the controller is input to a motor driving the pump or to the valve to vary the rate of flow as required to achieve the desired infusion rate of the medicinal fluid.